IN THE CLAIMS:

Please AMEND the claims as follows:

4. (ONCE AMENDED) A connection admission control method according to claim 1, wherein the connection admission control method determines whether to accept or refuse new constant speed connections and new variable speed connections, the method further comprising the steps of:

summing existing and new constant speed connections;

if the sum [of bandwidths] for existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections; and

adjusting the maximum factor.

5. (ONCE AMENDED) A connection admission control method according to claim 4, further comprising the step of:

determining whether to accept or refuse new constant speed connections based on whether the sum of existing and new constant speed connections [exceed] exceeds the bandwidth available to constant speed connections.

10. (ONCE AMENDED) A connection admission control method according to claim 8, further comprising the steps of:

assigning equivalent bandwidths to unspecified connections;

increasing or reducing the equivalent bandwidths of the unspecified connections

by the scaling factor to achieve [an] assigned [bandwidth] bandwidths; and

determining whether to accept or refuse new unspecified connections based on whether the sum of assigned bandwidths for existing and new unspecified connections exceeds a bandwidth available to unspecified connections.

Please ADD new claims as follows:

--13. A connection admission control method according to claim 2, wherein the connection admission control method determines whether to accept or refuse new constant speed connections and new variable speed connections, the method further comprising the steps of:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections by a constant speed traffic factor; and

adjusting the constant speed traffic factor.--

--14. A connection admission control method according to claim 2, wherein

adjusting the scaling factor and the variable speed traffic factor causes different scaling factors and variable speed traffic factors to be used when different variable speed connections are evaluated for acceptance,

the packet-based switching system stores the scaling factors and variable speed

traffic factors used when existing constant speed connections were accepted, and

a new variable speed connection is accepted if the following equation is satisfied:

$$EBW_1 \bullet \beta_1/\rho_{VBR,1} + EBW_2 \bullet \beta_2/\rho_{VBR,2} + EBW_3 \bullet \beta_3/\rho_{VBR,3} \ldots + \ldots EBW_n \bullet \beta_n/\rho_{VBR,n} \leq TBW_{VBR} \quad (4)$$

where one of EBW_1 to EBW_n is the nominal equivalent bandwidth for the new variable speed connection, the others of EBW_1 to EBW_n are the nominal equivalent bandwidths for existing variable speed connections, one of β_1 to β_n is the scaling factor used when equation (4) is evaluated, the others of one of β_1 to β_n are the scaling factors used when the existing variable speed connections were accepted, one of $\rho_{VBR,1}$ to $\rho_{VBR,n}$ is the variable speed traffic factor used when equation (4) is evaluated, the others of $\rho_{VBR,1}$ to $\rho_{VBR,n}$ are the variable speed traffic factors used when existing variable speed connections were accepted, and TBW_{VBR} is the bandwidth available to variable speed connections.--

--15. A connection admission control method for a packet-based switching system, comprising the steps of:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections; and

adjusting the maximum factor.--

--16. A connection admission control method according to claim 15, wherein the

maximum factor is adjusted while the packet-based switch is online.--

--17. A connection admission control method according to claim 15, further comprising the step of:

determining whether to accept or refuse new constant speed connections based on whether the sum of existing and new constant speed connections exceeds the bandwidth available to constant speed connections.--

--18. A connection admission control method for a packet-based switching system, comprising the steps of:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections by a constant speed traffic factor; and

adjusting the constant speed traffic factor.--

--19. A connection admission control method according to claim 18, wherein the constant speed factor is adjusted while the packet-based switch is online.--

--20. A connection admission control method according to claim 18, further comprising the step of adjusting the maximum factor.--

--21. A connection admission control method according to claim 18, wherein

adjusting the constant speed traffic factor causes different constant speed traffic factors to be used when different constant speed connections are evaluated for acceptance,

the packet-based switching system stores the constant speed traffic factors used when existing constant speed connections were accepted, and

a new constant speed connection is accepted if the following equation is satisfied:

$$CBR_1/\rho_{CBR,1} + CBR_2/\rho_{CBR,2} + CBR_3/\rho_{CBR,3} \ldots + \ldots CBR_n/\rho_{CBR,n} \leq TBW_{CBR} \quad (2)$$

where one of CBR_1 to CBR_n is the nominal bit rate of the new constant speed connection, the others of CBR_1 to CBR_n are the nominal bit rates of the existing constant speed connections, one of $\rho_{CBR,1}$ to $\rho_{CBR,n}$ is the constant speed traffic factor used when equation (2) is evaluated, the others of $\rho_{CBR,1}$ to $\rho_{CBR,n}$ are the constant speed traffic factor used when existing constant speed connections were accepted, and TBW_{CBR} is the bandwidth available to constant speed connections.--

--22. A connection admission control method for a packet-based switching system, comprising the steps of:

determining sustained cell rates for unspecified connections not having a sustained cell rate, based on an SCR factor, and

adjusting the SCR factor.--

--23. A connection admission control method according to claim 22, wherein the sustained cell rate for unspecified connections is determined by multiplying a peak cell rate by the SCR factor.--

--24. A connection admission control method according to claim 22, wherein the SCR factor is adjusted while the packet-based switch is online.--

--25. A connection admission control method according to claim 22, further comprising the steps of:

assigning equivalent bandwidths to unspecified connections;

increasing or decreasing the equivalent bandwidths of the unspecified connections by a scaling factor to achieve assigned bandwidths; and

determining whether to accept or refuse new unspecified connections based on whether the sum of assigned bandwidths for existing and new unspecified connections exceeds a bandwidth available to unspecified connections.--

--26. A connection admission control method according to claim 25, wherein the scaling factor and the SCR factor are adjusted while the packet-based switch is online.--

--27. A connection admission control method according to claim 25, further comprising the step of adjusting the scaling factor, wherein:

adjusting the scaling factor causes different scaling factors to be used when different unspecified connections are evaluated for acceptance,

the packet-based switching system stores the scaling factors used when existing unspecified connections were accepted, and

a new unspecified speed connection is accepted if the following equation is satisfied:

$$EBW_1 \bullet \beta_1 + EBW_2 \bullet \beta_2 + EBW_3 \bullet \beta_3 \ldots + \ldots EBW_n \bullet \beta_n \leq TBW_{UBR} \quad (3)$$

where one of EBW_1 to EBW_n is the nominal equivalent bandwidth for the new unspecified connection, the others of EBW_1 to EBW_n are the nominal equivalent bandwidths for existing unspecified connections, one of β_1 to β_n is the scaling factor used when equation (3) is evaluated, the others of one of β_1 to β_n are the scaling factors used when the existing unspecified connections were accepted, and TBW_{UBR} is the bandwidth available to unspecified connections.--

--28. A connection admission control method according to claim 22, further comprising the steps of:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections; and

adjusting the maximum factor.--

--29. A connection admission control method according to claim 22, further comprising the steps of:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections by a constant speed traffic factor; and

adjusting the constant speed traffic factor.--

--30. A connection admission control device for a packet-based switching system, comprising:

an EBW device to assign equivalent bandwidths to variable speed connections;

a scaling unit to increase or reduce the equivalent bandwidths of the variable speed connections by a scaling factor to achieve an assigned bandwidth, the scaling factor being adjustable to change the assigned bandwidths; and

an admission control device to determine whether to accept or refuse new variable speed connections based on whether the sum of assigned bandwidths for existing variable speed connections and new variable speed connections exceeds a bandwidth available to variable speed connections.--

--31. A connection admission control device according to claim 30, further comprising:

a variable traffic unit to increase or reduce the bandwidth available to variable speed connections by a variable speed traffic factor, the variable speed traffic factor being adjustable.--

--32. A connection admission control device according to claim 31, wherein the scaling factor and variable speed traffic factor are adjustable while the packet-based switching system is online.--

--33. A connection admission control device according to claim 31, wherein the admission unit determines whether to accept or refuse new constant speed connections and new variable speed connections, the device further comprising:

a summing device to sum existing and new constant speed connections such that if the sum of existing and new constant speed connections exceeds a maximum factor, a bandwidth available to constant speed connections is reduced by a constant speed traffic factor, the constant speed traffic factor being adjustable.--

--34. A connection admission control device according to claim 31, wherein

adjusting the scaling factor and the variable speed traffic factor causes different scaling factors and variable speed traffic factors to be used when different variable speed

connections are evaluated for acceptance,

the packet-based switching system stores the scaling factors and variable speed traffic factors used when existing constant speed connections were accepted, and

the admission unit accepts a new variable speed connection if the following equation is satisfied:

$EBW_1 \bullet \beta_1/\rho_{VBR,1} + EBW_2 \bullet \beta_2/\rho_{VBR,2} + EBW_3 \bullet \beta_3/\rho_{VBR,3} \ldots + \ldots EBW_n \bullet \beta_n/\rho_{VBR,n} \leq TBW_{VBR}$ 4)

where one of EBW_1 to EBW_n is the nominal equivalent bandwidth for the new variable speed connection, the others of EBW_1 to EBW_n are the nominal equivalent bandwidths for existing variable speed connections, one of β_1 to β_n is the scaling factor used when equation (4) is evaluated, the others of one of β_1 to β_n are the scaling factors used when the existing variable speed connections were accepted, one of $\rho_{VBR,1}$ to $\rho_{VBR,n}$ is the variable speed traffic factor used when equation (4) is evaluated, the others of $\rho_{VBR,1}$ to $\rho_{VBR,n}$ are the variable speed traffic factors used when existing variable speed connections were accepted, and TBW_{VBR} is the bandwidth available to variable speed connections.--

--35. A connection admission control device according to claim 30, wherein the admission unit determines whether to accept or refuse new constant speed connections and new variable speed connections, the device further comprising:

a summing device to sum existing and new constant speed connections such that if the sum for existing and new constant speed connections exceeds a maximum factor, a bandwidth available to constant speed connection is reduced, the maximum factor being

adjustable.--

--36. A connection admission control device according to claim 35, wherein the admission unit determines whether to accept or refuse new constant speed connections based on whether the sum of existing and new constant speed connections exceeds the bandwidth available to constant speed connections.--

--37. A connection admission control device according to claim 35, wherein the bandwidth available to constant speed connections is reduced by a constant speed traffic factor if the sum of bandwidths for existing and new constant speed connections exceeds the maximum factor, the constant speed traffic parameter being adjustable.--

--38. A connection admission control device according to claim 37, wherein the scaling factor, the maximum factor and the constant speed traffic factor are adjustable while the packet-based switching system is online.--

--39. A connection admission control device according to claim 30, wherein the admission unit determines whether to accept or refuse new unspecified connections and new variable speed connections, at least a portion of the unspecified connections not having a sustained cell rate, the device further comprising an SCR unit to determine the sustained cell rate based on an SCR factor, the SCR factor being adjustable.--

--40. A connection admission control device according to claim 39, wherein the SCR unit determines the sustained cell rate for unspecified connections by multiplying a peak cell rate by the SCR factor.--

--41. A connection admission control device according to claim 39, wherein

the device further comprises an EBW device to assign equivalent bandwidths to unspecified connections,

the scaling unit increases or reduces the equivalent bandwidths of the unspecified connections by the scaling factor to achieve assigned bandwidths, and

the admission unit determines whether to accept or refuse new unspecified connections based on whether the sum of assigned bandwidths for existing and new unspecified connections exceeds a bandwidth available to unspecified connections.--

--42. A connection admission control device according to claim 41, wherein the scaling factor and the SCR factor are adjustable while the packet-based switch is online.--

--43. A device according to claim 30, wherein the admission unit:

maintains an original scaling factor for all existing variable speed connections,

uses a new scaling factor to allocate bandwidth for all new variable speed connections; and

when an existing variable speed connection is terminated, frees an assigned bandwidth determined by the original scaling factor and reallocating freed bandwidth based on the new scaling factor.--

--44. A connection admission control device for a packet-based switching system, comprising:

a summing device to sum existing and new constant speed connections; and

a constant traffic controls to reduce a bandwidth available to constant speed connections if the sum of existing and new constant speed connections exceeds a maximum factor, the maximum factor being adjustable.--

--45. A connection admission control device according to claim 44, wherein the maximum factor is adjustable while the packet-based switch is online.--

--46. A connection admission control device according to claim 44, further comprising:

an admission unit to determine whether to accept or refuse new constant speed connections based on whether the sum of existing and new constant speed connections exceeds the bandwidth available to constant speed connections.--

--47. A connection admission control device for a packet-based switching system,

comprising:

a summing device to sum existing and new constant speed connections; and

a constant traffic unit to reduce a bandwidth available to constant speed connections by a constant speed traffic factor if the sum of existing and new constant speed connections exceeds a maximum factor, the constant speed traffic factor being adjustable.--

--48. A connection admission control device according to claim 47, wherein the constant speed factor is adjustable while the packet-based switch is online.--

--49. A connection admission control device according to claim 47, wherein the maximum factor is adjustable.--

--50. A connection admission control device according to claim 47, wherein

adjusting the constant speed traffic factor causes different constant speed traffic factors to be used when different constant speed connections are evaluated for acceptance,

the packet-based switching system stores the constant speed traffic factors used when existing constant speed connections were accepted, and

the device further comprises an admission unit to accept a new constant speed connection if the following equation is satisfied:

$$CBR_1/\rho_{CBR,1} + CBR_2/\rho_{CBR,2} + CBR_3/\rho_{CBR,3} \ldots + \ldots CBR_n/\rho_{CBR,n} \leq TBW_{CBR} \quad (2)$$

where one of CBR_1 to CBR_n is the nominal bit rate of the new constant speed connection, the others of CBR_1 to CBR_n are the nominal bit rates of the existing constant speed connections, one of $\rho_{CBR,1}$ to $\rho_{CBR,n}$ is the constant speed traffic factor used when equation (2) is evaluated, the others of $\rho_{CBR,1}$ to $\rho_{CBR,n}$ are the constant speed traffic factor used when existing constant speed connections were accepted, and TBW_{CBR} is the bandwidth available to constant speed connections.--

--51. A connection admission control device for a packet-based switching system, comprising an SCR unit to determine sustained cell rates for unspecified connections not having a sustained cell rate, based on an SCR factor, the SCR factor being adjustable.--

--52. A connection admission control device according to claim 51, wherein the SCR unit determines the sustained cell rate for unspecified connections by multiplying a peak cell rate by the SCR factor.--

--53. A connection admission control device according to claim 51, wherein the SCR factor is adjustable while the packet-based switch is online.--

--54. A connection admission control device according to claim 51, further comprising:

an EBW device to assign equivalent bandwidths to unspecified connections;

a scaling unit to increase or decrease the equivalent bandwidths of the unspecified connections by a scaling factor to achieve assigned bandwidths; and

an admission unit to determine whether to accept or refuse new unspecified connections based on whether the sum of assigned bandwidths for existing and new unspecified connections exceeds a bandwidth available to unspecified connections.--

--55. A connection admission control device according to claim 54, wherein the scaling factor and the SCR factor are adjustable while the packet-based switch is online.--

--56. A connection admission control device according to claim 54, further comprising adjusting the scaling factor, wherein:

adjusting the scaling factor causes different scaling factors to be used when different unspecified connections are evaluated for acceptance,

the packet-based switching system stores the scaling factors used when existing unspecified connections were accepted, and

the admission unit accepts a new unspecified speed connection if the following equation is satisfied:

$$EBW_1 \bullet \beta_1 + EBW_2 \bullet \beta_2 + EBW_3 \bullet \beta_3 \ldots + \ldots EBW_n \bullet \beta_n \leq TBW_{UBR} \quad (3)$$

where one of EBW_1 to EBW_n is the nominal equivalent bandwidth for the new unspecified connection, the others of EBW_1 to EBW_n are the nominal equivalent bandwidths for existing unspecified connections, one of β_1 to β_n is the scaling factor used when equation (3) is

evaluated, the others of one of β_1 to β_n are the scaling factors used when the existing unspecified connections were accepted, and TBW_{UBR} is the bandwidth available to unspecified connections.--

--57. A connection admission control device according to claim 51, further comprising:

a summing device to sum existing and new constant speed connections; and

a constant traffic unit to reduce a bandwidth available to constant speed connections if the sum of existing and new constant speed connections exceeds a maximum factor, the maximum factor being adjustable.--

--58. A connection admission control device according to claim 51, further comprising:

a summing device to sum existing and new constant speed connections; and

a constant traffic unit to reduce a bandwidth available to constant speed connections by a constant speed traffic factor if the sum of existing and new constant speed connections exceeds a maximum factor, the constant speed traffic factor being adjustable.--

--59. A machine-readable medium storing software for controlling a packet-based switch to perform a method comprising:

assigning equivalent bandwidths to variable speed connections;

increasing or reducing the equivalent bandwidths of the variable speed connections by a scaling factor to achieve an assigned bandwidth;

adjusting the scaling factor to change the assigned bandwidths; and

determining whether to accept or refuse new variable speed connections based on whether the sum of assigned bandwidths for existing variable speed connections and new variable speed connections exceeds a bandwidth available to variable speed connections.--

--60. A machine-readable medium according to claim 59, the method further comprising:

increasing or reducing the bandwidth available to variable speed connections by a variable speed traffic factor; and

adjusting the variable speed traffic factor.--

--61. A machine-readable medium according to claim 60, wherein the scaling factor and variable speed traffic factor are adjusted while the packet-based switching system is online.--

--62. A machine-readable medium according to claim 60, wherein the connection admission control method determines whether to accept or refuse new constant speed connections and new variable speed connections, the method further comprising:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections by a constant speed traffic factor; and

adjusting the constant speed traffic factor.--

--63. A machine-readable medium according to claim 60, wherein

adjusting the scaling factor and the variable speed traffic factor causes different scaling factors and variable speed traffic factors to be used when different variable speed connections are evaluated for acceptance,

the packet-based switching system stores the scaling factors and variable speed traffic factors used when existing constant speed connections were accepted, and

a new variable speed connection is accepted if the following equation is satisfied:

$$EBW_1 \bullet \beta_1/\rho_{VBR,1} + EBW_2 \bullet \beta_2/\rho_{VBR,2} + EBW_3 \bullet \beta_3/\rho_{VBR,3} \ldots + \ldots EBW_n \bullet \beta_n/\rho_{VBR,n} \leq TBW_{VBR} \quad (4)$$

where one of EBW_1 to EBW_n is the nominal equivalent bandwidth for the new variable speed connection, the others of EBW_1 to EBW_n are the nominal equivalent bandwidths for existing variable speed connections, one of β_1 to β_n is the scaling factor used when equation (4) is evaluated, the others of one of β_1 to β_n are the scaling factors used when the existing variable speed connections were accepted, one of $\rho_{VBR,1}$ to $\rho_{VBR,n}$ is the variable speed traffic factor used when equation (4) is evaluated, the others of $\rho_{VBR,1}$ to $\rho_{VBR,n}$ are the variable speed traffic factors used when existing variable speed connections were accepted, and TBW_{VBR} is the

bandwidth available to variable speed connections.--

--64. A machine-readable medium according to claim 59, wherein the connection admission control method determines whether to accept or refuse new constant speed connections and new variable speed connections, the method further comprising:

summing existing and new constant speed connections;

if the sum for existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections; and

adjusting the maximum factor.--

--65. A machine-readable medium according to claim 64, the method further comprising:

determining whether to accept or refuse new constant speed connections based on whether the sum of existing and new constant speed connections exceeds the bandwidth available to constant speed connections.--

--66. A machine-readable medium according to claim 64, wherein the bandwidth available to constant speed connections is reduced by a constant speed traffic factor if the sum of bandwidths for existing and new constant speed connections exceeds the maximum factor, the method further comprising adjusting the constant speed traffic parameter.--

--67. A machine-readable medium according to claim 66, wherein the scaling factor, the maximum factor and the constant speed traffic factor are adjusted while the packet-based switching system is online.--

--68. A machine-readable medium according to claim 59, wherein the connection admission control method determines whether to accept or refuse new unspecified connections and new variable speed connections, at least a portion of the unspecified connections not having a sustained cell rate, the sustained cell rate being determined based on an SCR factor, the method further comprising adjusting the SCR factor.--

--69. A machine-readable medium according to claim 68, wherein the sustained cell rate for unspecified connections is determined by multiplying a peak cell rate by the SCR factor.--

--70. A machine-readable medium according to claim 68, the method further comprising:

assigning equivalent bandwidths to unspecified connections;

increasing or reducing the equivalent bandwidths of the unspecified connections by the scaling factor to achieve an assigned bandwidth; and

determining whether to accept or refuse new unspecified connections based on whether the sum of assigned bandwidths for existing and new unspecified connections exceeds

a bandwidth available to unspecified connections.--

--71. A machine-readable medium according to claim 70, wherein the scaling factor and the SCR factor are adjusted while the packet-based switch is online.--

--72. A method according to claim 59, further comprising:

maintaining an original scaling factor for all existing variable speed connections;

using a new scaling factor to allocate bandwidth for all new variable speed connections; and

when an existing variable speed connection is terminated, freeing an assigned bandwidth determined by the original scaling factor and reallocating freed bandwidth based on the new scaling factor.--

--73. A machine-readable medium storing software for controlling a packet-based switch to perform a method comprising:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections; and

adjusting the maximum factor.--

--74. A machine-readable medium according to claim 73, wherein the maximum

factor is adjusted while the packet-based switch is online.--

--75. A machine-readable medium according to claim 73, the method further comprising:

determining whether to accept or refuse new constant speed connections based on whether the sum of existing and new constant speed connections exceeds the bandwidth available to constant speed connections.--

--76. A machine-readable medium for controlling a packet-based switch to perform a method comprising:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections by a constant speed traffic factor; and

adjusting the constant speed traffic factor.--

--77. A machine-readable medium according to claim 76, wherein the constant speed factor is adjusted while the packet-based switch is online.--

--78 A machine-readable medium according to claim 76, the method further comprising adjusting the maximum factor.--

--79. A machine-readable medium according to claim 76, wherein

adjusting the constant speed traffic factor causes different constant speed traffic factors to be used when different constant speed connections are evaluated for acceptance,

the packet-based switching system stores the constant speed traffic factors used when existing constant speed connections were accepted, and

a new constant speed connection is accepted if the following equation is satisfied:

$$CBR_1/\rho_{CBR,1} + CBR_2/\rho_{CBR,2} + CBR_3/\rho_{CBR,3} \ldots + \ldots CBR_n/\rho_{CBR,n} \leq TBW_{CBR} \quad (2)$$

where one of CBR_1 to CBR_n is the nominal bit rate of the new constant speed connection, the others of CBR_1 to CBR_n are the nominal bit rates of the existing constant speed connections, one of $\rho_{CBR,1}$ to $\rho_{CBR,n}$ is the constant speed traffic factor used when equation (2) is evaluated, the others of $\rho_{CBR,1}$ to $\rho_{CBR,n}$ are the constant speed traffic factor used when existing constant speed connections were accepted, and TBW_{CBR} is the bandwidth available to constant speed connections.--

--80. A machine-readable medium storing software for controlling a packet-based switch to perform a method comprising:

determining sustained cell rates for unspecified connections not having a sustained cell rate, based on an SCR factor, and

adjusting the SCR factor.--

--81. A machine-readable medium according to claim 80, wherein the sustained cell rate for unspecified connections is determined by multiplying a peak cell rate by the SCR factor.--

--82. A machine-readable medium according to claim 80, wherein the SCR factor is adjusted while the packet-based switch is online.--

--83. A machine-readable medium according to claim 80, the method further comprising:

assigning equivalent bandwidths to unspecified connections;

increasing or decreasing the equivalent bandwidths of the unspecified connections by a scaling factor to achieve assigned bandwidths; and

determining whether to accept or refuse new unspecified connections based on whether the sum of assigned bandwidths for existing and new unspecified connections exceeds a bandwidth available to unspecified connections.--

--84. A machine-readable medium according to claim 83, wherein the scaling factor and the SCR factor are adjusted while the packet-based switch is online.--

--85 A machine-readable medium according to claim 83, the method further

comprising adjusting the scaling factor, wherein:

adjusting the scaling factor causes different scaling factors to be used when different unspecified connections are evaluated for acceptance,

the packet-based switching system stores the scaling factors used when existing unspecified connections were accepted, and

a new unspecified speed connection is accepted if the following equation is satisfied:

$$EBW_1 \bullet \beta_1 + EBW_2 \bullet \beta_2 + EBW_3 \bullet \beta_3 \ldots + \ldots EBW_n \bullet \beta_n \leq TBW_{UBR} \quad (3)$$

where one of EBW_1 to EBW_n is the nominal equivalent bandwidth for the new unspecified connection, the others of EBW_1 to EBW_n are the nominal equivalent bandwidths for existing unspecified connections, one of β_1 to β_n is the scaling factor used when equation (3) is evaluated, the others of one of β_1 to β_n are the scaling factors used when the existing unspecified connections were accepted, and TBW_{UBR} is the bandwidth available to unspecified connections.--

--86. A machine-readable medium according to claim 80, the method further comprising:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections; and

adjusting the maximum factor.--

--87. A machine-readable medium according to claim 80, the method further comprising:

summing existing and new constant speed connections;

if the sum of existing and new constant speed connections exceeds a maximum factor, reducing a bandwidth available to constant speed connections by a constant speed traffic factor; and

adjusting the constant speed traffic factor.--

--88. A connection admission control device for a packet-based switching system, comprising:

means for assigning equivalent bandwidths to variable speed connections;

means for increasing or reducing the equivalent bandwidths of the variable speed connections by a scaling factor to achieve an assigned bandwidth;

means for adjusting the scaling factor to change the assigned bandwidths; and

means for determining whether to accept or refuse new variable speed connections based on whether the sum of assigned bandwidths for existing variable speed connections and new variable speed connections exceeds a bandwidth available to variable speed connections.--